

come in contact with a compound which generates ammonia in calcination, or both while the titanium compound is in contact with a compound which generates ammonia in calcination and after the titanium compound has come in contact with a compound which generates ammonia in calcination, or

(ii) steps of treating a titanium compound with heat in the presence of ammonia gas and calcining the heat-treated titanium compound,

wherein the compound which generates ammonia in calcination is at least one compound selected from the group consisting of ammonium solution, an ammonium compound, an urea and titanium-containing ammonium compound.

4. (amended) A process for producing a titanium oxide according to claim 1 or 2, wherein the calcination is conducted at a temperature of from about 300°C to about 600°C.

5. (amended) A process for producing a titanium oxide according to claim 1 or 2, wherein the titanium oxide has an amorphous phase.

7. (amended) A process for producing a titanium oxide according to claim 2 or 6, wherein the titanium compound to be treated with heat has a fibrous shape.

8. (amended) A process for producing a titanium oxide according to claim 1, wherein the compound which generates ammonia in calcination is the ammonia solution.

9. (amended) A process for producing a titanium oxide according to claim 1, wherein the compound which generates ammonia in calcination is the ammonium compound.

10. (amended) A process for producing a titanium oxide according to claim 1, wherein the titanium hydroxide is allowed to come in contact with the a compound which

generates ammonia in calcination in amount of from about 0.1 % by weight to about 10 % by weight in terms of nitrogen atom in the ammonia-generating compound based on the titanium hydroxide substantially containing no water.

**Please add the following new claims:**

11. (new) A process for producing a titanium oxide according to claim 1, wherein the titanium compound is calcined while the titanium compound is in contact with the compound which generates ammonia in calcination.

12. (new) A process for producing a titanium oxide according to claim 1, wherein the titanium compound has come in contact with the compound which generates ammonia in calcination and is then calcined.

13. (new) A process for producing a titanium oxide according to any one of claims 1, 2, 11 or 12, wherein the titanium compound is titanium hydroxide.

14. (new) A process for producing a titanium oxide according to claim 4, wherein the calcination is conducted at a temperature of about 500 °C or lower.

15. (new) A process for producing a titanium oxide according to claim 4, wherein the calcination is conducted at a temperature of from about 300 °C to about 400 °C.

16. (new) A process for producing a titanium oxide according to claim 4, wherein the calcination is conducted at a temperature of from about 300 °C to about 350 °C.

17. (new) A process for producing a titanium oxide according to claim 1 or 2, wherein the heat treatment is conducted at a temperature of from about 50 °C to about 200 °C.

18. (new) A process for producing a titanium oxide according to claim 12, wherein the titanium compound is in contact with the compound which generates ammonia in calcination at a temperature of from 0 °C to about 200 °C.